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ABSTRACT

This document presents the effects of variations of a schoolwide restructuring program, Success for All, on student reading achievement and other outcomes in elementary schools serving large numbers of disadvantaged students. Success for All uses research-based preschool and kindergarten programs, beginning and intermediate reading programs in grades 1 through 3, one-to-one tutoring for low-achieving students, family support programs, and other elements. Five Baltimore (Maryland) schools were studied over a period of 3 years (4 schools) or 4 years (1 school). Comparisons with matched students in matched schools indicate strong positive effects on most individually administered reading measures in most schools for students who have been in the program since the first grade. In particular, 15.7 percent of participating students were reading 1 year below grade level, and 3.9 percent were 2 years behind. In the control schools, 38 percent were at least 1 year below grade level, and 11.7 percent were 2 years below. Particularly large effects were found for students who were in the lowest 25 percent of their grades on pretests. Retentions in grade were also substantially reduced, and attendance increased over time. Included are six tables and one figure and 38 references. (JB)

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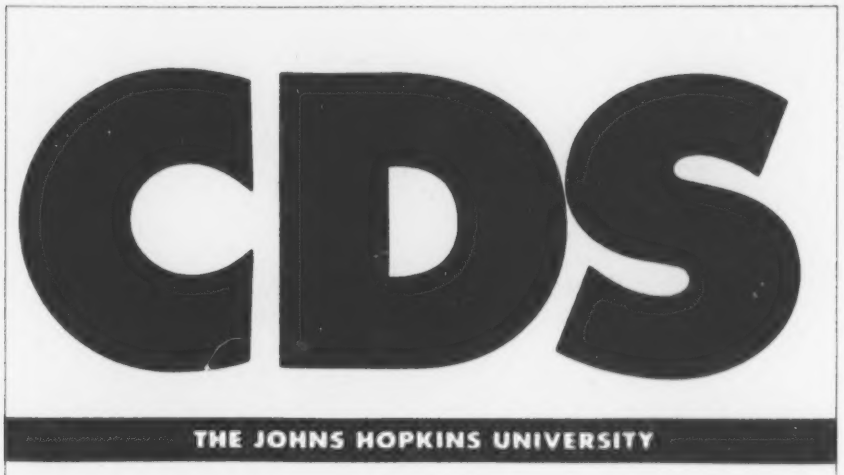

THE JOHNS HOPKINS UNIVERSITY

SUCCESS FOR ALL

Longitudinal Effects of a Restructuring Program For Inner-City Elementary Schools

Nancy A. Madden
Robert E. Slavin
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Report No. 28

March 1992

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The Center

The mission of the Center for Research on Effective Schooling for Disadvantaged Students (CDS) is to significantly improve the education of disadvantaged students at each level of schooling through new knowledge and practices produced by thorough scientific study and evaluation. The Center conducts its research in four program areas: The Early and Elementary Education Program, The Middle Grades and High Schools Program, the Language Minority Program, and the School, Family, and Community Connections Program.

The Early and Elementary Education Program

This program is working to develop, evaluate, and disseminate instructional programs capable of bringing disadvantaged students to high levels of achievement, particularly in the fundamental areas of reading, writing, and mathematics. The goal is to expand the range of effective alternatives which schools may use under Chapter 1 and other compensatory education funding and to study issues of direct relevance to federal, state, and local policy on education of disadvantaged students.

The Middle Grades and High Schools Program

This program is conducting research syntheses, survey analyses, and field studies in middle and high schools. The three types of projects move from basic research to useful practice. Syntheses compile and analyze existing knowledge about effective education of disadvantaged students. Survey analyses identify and describe current programs, practices, and trends in middle and high schools, and allow studies of their effects. Field studies are conducted in collaboration with school staffs to develop and evaluate effective programs and practices.

The Language Minority Program

This program represents a collaborative effort. The University of California at Santa Barbara is focusing on the education of Mexican-American students in California and Texas; studies of dropout among children of recent immigrants are being conducted in San Diego and Miami by Johns Hopkins, and evaluations of learning strategies in schools serving Navajo Indians are being conducted by the University of Northern Arizona. The goal of the program is to identify, develop, and evaluate effective programs for disadvantaged Hispanic, American Indian, Southeast Asian, and other language minority children.

The School, Family, and Community Connections Program

This program is focusing on the key connections between schools and families and between schools and communities to build better educational programs for disadvantaged children and youth. Initial work is seeking to provide a research base concerning the most effective ways for schools to interact with and assist parents of disadvantaged students and interact with the community to produce effective community involvement.

Abstract

This article presents the effects of variations of a schoolwide restructuring program, Success for All, on student reading achievement and other outcomes in elementary schools serving large numbers of disadvantaged students. Success for All uses research-based preschool and kindergarten programs, beginning and intermediate reading programs in grades 1-3, one-to-one tutoring for low-achieving students, family support programs, and other elements. A total of five Baltimore schools were studied over a period of three years (4 schools) or four years (1 school). Comparisons with matched students in matched schools indicated strong positive effects on most individually administered reading measures in most schools for students who have been in the program since first grade. Particularly large effects were found for students who were in the lowest 25 % of their grades on pretests. Retentions in grade were also substantially reduced and attendance increased over time.

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Introduction

There is a continuing crisis in the reading performance of minority students in the U.S. Despite steady improvements over the past twenty years, African American students still read substantially less well than do whites. On the 1988 National Assessment of Educational Progress, only 39% of African American nine-year-olds could read at the "basic" level, compared to 68% of whites (Mullis & Jenkins, 1990). In many urban districts, retention rates for first graders have exceeded 20% in recent years, and identification of students as learning disabled has risen. Both retention and special education placement are largely determined on the basis of reading performance (see Norman & Zigmond, 1980; Shepard & Smith, 1989).

The damage done to children by early reading failure and the costs to school systems and society are heavy. Students who fail to read adequately by third grade are highly unlikely to ultimately graduate from high school, and are at very high risk for delinquency, early pregnancy, and other problems (Kelly, Veldman, & McGuire, 1964; Lloyd, 1978). In the inner city, where poverty, social disorganization, and underfunded schools are typical, school failure is endemic (Natriello, McDill, & Pallas, 1990).

Yet there are some hopeful trends. Nationally, Chapter 1 funding has dramatically increased in recent years, and changes in legislation have allowed schools in which at least 75% of students are in poverty to use their Chapter 1 dollars flexibly to serve all students (Committee on Education and Labor, 1990). Growing political support for the concept of prevention and early intervention to head off early learning deficits has led to increases in the federal Head Start program and increases in preschool programs in many states.

Research on the effects of prevention and early intervention on the school success of disadvantaged students supports a variety of strategies, including provision of high-quality preschool programs (Berrueta-Clement, Schweinhart, Barnett, Epstein, & Weikart, 1984; Karweit, 1989a), full-day kindergarten (Karweit, 1989b), one-to-one tutoring of at-risk first graders (Pinnell, 1989; Silver & Hagin, 1990), improvements in reading curriculum and instructional methods (Adams, 1990) and cooperative learning (Slavin, 1990). However, each of these strategies only affects students of certain ages, and in most cases effects of one-year interventions fade in later years (see Slavin, Karweit, & Wasik, in press).

Success for All Implementations

How much could a coordinated, multi-year program of prevention and early intervention help to prevent school failure among inner-city children? This is the question addressed by the present article, which describes the implementation and evaluation of a program called Success for All.

Success for All is designed to attempt to ensure that every student in a high-poverty school will succeed in acquiring basic skills in the early grades. Success is defined as performance in reading at or near grade level by the third grade, maintenance of this status through the end of elementary grades, and avoidance of retention or special education.

The program seeks to accomplish this objective by implementing high-quality preschool and kindergarten programs, one-to-one tutoring in reading to students (especially first graders) who need it, research-based reading instruction in all grades, frequent assessment of progress in reading, and a family support program (program elements are described in detail below).

The principal theoretical basis for the Success for All approach is the idea that learning deficits must be prevented in a comprehensive approach emphasizing early education, improvement in instruction and curriculum, and intensive intervention at the earliest possible stage when deficiencies first begin to appear. The goal is to prevent remediation at all costs; once students have fallen seriously behind, they are unlikely to ever catch up to their agemates, as the experience of failure introduces problems of poor motivation, self-esteem, and behavior that

undermine the effectiveness of even the best remedial or special education approaches (see Bloom, 1981; Allington & McGill-Franzen, 1990). As noted earlier, disadvantaged third graders who have failed a grade or who are reading significantly below grade level are very unlikely to graduate from high school (Lloyd, 1978) and will experience difficulties throughout their school careers (Shepard and Smith, 1989). Students who enter special education or compensatory education programs are likely to remain in them for many years, often for their entire school careers (Anderson & Pellicer, 1990).

It is hypothesized that by combining prevention (high-quality preschool, kindergarten, and beginning reading instruction), early intensive intervention (tutoring for at-risk first graders, family support services), and continuing low-cost maintenance interventions in grades 2-5 (cooperative learning, other improvements in curriculum and instruction), all students can reach the end of their elementary schooling on time with good reading skills.

Success for All Schools

Success for All was first implemented in the 1987-88 school year in one inner-city Baltimore elementary school, Abbottston Elementary. The first year assessment revealed substantially higher student performance on measures of language development in preschool and kindergarten and on measures of reading in grades 1-3, compared to students in a matched school. Reading gains were especially large for students who had been in the lowest 25% of their grade on pretests; for these students, effect sizes* averaged +.80 on individually administered measures. Further, there were substantial reductions in the numbers of students retained or assigned to special education (see Slavin et al., 1990).

During the 1988-89 school year, four additional Baltimore schools began to implement Success for All. These schools varied in the resources added to their regular Chapter 1 allotments. In the original Success for All school, Abbottston Elementary School, and in one other school, City Springs Elementary School, approximately $400,000 was added to hire additional staff to try to ensure that every child would succeed. These are referred to as "high-resource" schools.

Three additional Baltimore schools implemented a much less expensive form of the program which reconfigured existing Chapter 1 resources and added approximately $40,000 for materials, training, and a half-time project facilitator. These are referred to as "low-resource" schools. All of these Baltimore sites serve student bodies that are almost entirely African American.

The curricula being implemented in all Success for All schools are essentially the same, with each school receiving the same materials, supplies, and training. However, the schools vary considerably in numbers of personnel, especially in the numbers of tutors and family support staff. Table 1 summarizes the major characteristics and staffing of the five Success for All schools in Baltimore.

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Table 1 Here
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All of the Baltimore Success for All schools are among the most disadvantaged schools in the city. All are Chapter 1 schoolwide projects, which means that at least 75% of students qualify for free lunch and that schools can use their Chapter 1 resources to serve all children, rather than only test-eligible children.

Evaluations of Success for All have been conducted each year. The 1988-89 assessment (Madden, Slavin, Karweit, Dolan, & Wasik, 1990) found that effects on reading achievement were very positive at Abbottston Elementary in all grades (1-3) in its second year of implementation. Weaker but still positive reading effects were found at City Springs and the low-resource schools (after less than a full year of implementation) in first and second grades. In all cases the largest effects were for the students who were in the lowest 25% of their classes at pretest.

The 1989-90 evaluation (Madden, Slavin, Karweit, Dolan, Wasik, Shaw, Mainzer, Leighton, & Petza, 1991) again found strong positive reading effects for Abbottston at all grade levels, and in this second implementation year for City Springs and the low-resource schools. Effects were much more positive in first and second grades than they had been after one year, especially for the lowest achievers. However,

* An effect size is the difference between the experimental and control group means divided by the control group's standard deviation.

only at Abbottston were strong effects seen for third graders.

We are now reporting the evaluation of Success for All as of the 1990-91 school year in its five Baltimore sites. This is a very important year. The original goal of Success for All was to bring all children near grade level in reading performance by the end of third grade (see Slavin, et al., 1990). This outcome cannot be fully assessed until students have been in the program from preschool through third grade, a total of five years. However, the 1990-91 evaluation provides the first opportunity to assess he performance of third graders who have been in the program since first grade (and, at Abbottston, since kindergarten). Can Success for All really achieve success for all?

Program Elements

The main elements of Success for All are described below (see Slavin, Madden, Karweit, Dolan, & Wasik, 1992, for more detail).

Reading Tutors

One of the most important elements for Success for All model is the use of tutors to promote students' success in reading. One-to-one tutoring is the most effective form of instruction known (see Slavin, Karweit, & Madden, 1989; Wasik & Slavin, 1990). The tutors are certified teachers with experience teaching Chapter 1, special education, and /or primary reading. Tutors work one-on-one with students who are having difficulties keeping up with their reading groups. The tutoring occurs in 20-minute sessions usually taken from an hour-long social studies period.

In general, tutors support students' success in the regular reading curriculum, rather than teaching different objectives. For example, the tutor will work with a student on the same story and concepts being read and taught in the regular class. However, tutors seek to identify learning problems, use different strategies to teach the same skills, and teach metacognitive skills beyond those taught in the classroom program (Wasik & Madden, 1991). High-resource schools have six or more tutors, and low-resource schools have two to three.

During daily 90-minute reading periods, tutors serve as additional reading teachers to reduce class size for reading to about 15 in high-resource schools and about 20 in low-resource schools (because they have fewer tutors to reduce class size). Reading teachers and tutors use brief forms to communicate about students' specific problems and needs and meet at regular times to coordinate their approaches with individual children.

Initial decisions about reading group placement and the need for tutoring are based on informal reading inventories that the tutors give to each child. Subsequent reading group placements and tutoring assignments are made based on curriculum-based assessments given every eight weeks, which include teacher judgments as well as more formal assessments.

First graders receive priority for tutoring, on the assumption that the primary function of the tutors is to help all students be successful in reading the first time, before they have the opportunity to fail and become remedial readers.

The tutoring aspect of Success for All is similar to the approach taken in another highly successful program, Reading Recovery (Pinnell, 1989). The major difference is that Success for All is closely linked to regular classroom reading instruction while Reading Recovery uses a stand-alone tutorial model.

Reading Programs

Students in grades 1-3 are regrouped for reading. The students are assigned to heterogeneous, age-grouped classes with class sizes of about 25 most of the day, but during a regular 90-minute reading period they are regrouped according to reading performance levels into reading classes of 15-20 students all at the same level. For example, a 2-1 reading class might contain first, second, and third grade students all reading at the same level, which eliminates the need for reading groups within the class.

This regrouping allows the teacher to teach the whole reading class without having to break the class into reading groups, increasing time for instruction and eliminating the need for unsupervised seatwork. This regrouping plan is

a form of the Joplin Plan, which has been found to increase achievement in elementary reading (Slavin, 1987).

Reading teachers at every grade level begin reading time by reading children's literature to students and engaging them in a discussion of the story to enhance their understanding of the story, listening and speaking vocabulary, and knowledge of story structure.

In kindergarten and first grade, the program emphasizes development of basic language skills with the use of Story Telling and Retelling (STaR), which involves the students in listening to, retelling, and dramatizing children's literature (Karweit, Coleman, Waclawiw, & Petza, 1990). Big books as well as oral and written composing activities allow students to develop concepts of print as they also develop knowledge of story structure. Peabody Language Development Kits are used to further develop receptive and expressive language.

Beginning reading (Madden & Livermon, 1990) is introduced in the second semester of kindergarten. In this program, letters and sounds are introduced in an active, engaging series of activities that begins with oral language and moves into written symbols. The K-1 reading program uses a series of phonetically regular but interesting minibooks and emphasizes repeated oral reading to partners as well as to the teacher. Individual sounds are integrated into a context of words, sentences, and stories. Instruction is provided in story structure, specific comprehension skills, and integration of reading and writing.

When students reach the primer reading level, they use a form of Cooperative Integrated Reading and Composition (CIRC) (Stevens, Madden, Slavin, & Farnish, 1987) with the district's basal series and novels. CIRC uses cooperative learning activities built around story structure, prediction, summarization, vocabulary building, decoding practice, and story-related writing. Students engage in partner reading and structured discussion of the stories or novels, and work toward mastery of the vocabulary and content of the story in teams. Story-related writing is also shared within teams.

Cooperative learning both increases students' motivation and engages them in activities known to contribute to reading comprehension, such as elaboration, summarization, and rephrasing (see Slavin, 1990). Specifically, research on CIRC has found it to significantly increase students' reading comprehension, language skills, and writing proficiency (Stevens et al., 1987).

In addition to these story-related activities, teachers provide direct instruction in reading comprehension skills, and students practice these skills in their teams. Classroom libraries of trade books at students' reading levels are provided for each teacher, and students read books of their choice for homework for 20 minutes each night. Home readings are shared though presentations, summaries, puppet shows, and other formats twice a week during " book club" sessions.

Eight-Week Reading Assessments

At eight week intervals, reading teachers assess student progress through the reading program. The results of the assessments are used to determine who is to receive tutoring, to change students' reading groups, to suggest other adaptations in students' programs, and to identify students who need other types of assistance, such as family interventions or screening for vision and hearing problems.

Preschool and Kindergarten

All of the Success for All schools in Baltimore provide a half-day preschool and three of the five provide a full-day kindergarten for eligible students. The preschool and kindergarten programs focus on providing a balanced and developmentally appropriate learning experience for young children. The curriculum emphasizes the development and use of language. Thematic units integrate language, math, social studies, music, and art activities. Children are encouraged to select activities and to work cooperatively and independently at a variety of centers. Readiness activities include use of the Peabody Language Development Kits and Story Telling and Retelling (STaR), in which students retell stories read by the teachers (Karweit & Coleman, 1991). Pre-reading activities begin in the second semester of kindergarten.

Family Support Team

A family support team works in each school. In the high-resource schools, social workers, attendance monitors, and other staff are added to the school's usual staff. In low-resource schools, the family support team consists of staff already present in school, such as the Chapter 1 parent liaison, counselor, vice principal, and teacher representatives.

The family support team provides parenting education and works to involve parents in support of their children's success in school. Also, family support staff are called upon to provide assistance when students seem to be working at less than full potential because of problems at home. Students who are not getting adequate sleep or nutrition, need glasses, are not attending school regularly, or are exhibiting serious behavior problems, receive family support assistance.

The family support team is strongly integrated into the academic program of the school. The team receives referrals from teachers and tutors regarding children who are not making adequate academic progress and thereby constitutes an additional stage of intervention for students in need above and beyond that provided by the classroom teacher or tutor.

The family support program in Success for All resembles approaches emphasized in James Comer's (1988) schoolwide restructuring model, which has been effective in increasing student achievement over time.

Program Facilitator

A program facilitator works at the school to oversee (with the principal) the operation of the Success for All model. High-resource schools in Baltimore have full-time facilitators, while low-resource schools have half-time facilitators.

The facilitator helps plan the Success for All program, helps the principal with scheduling, and visits classes and tutoring sessions frequently to help teachers and tutors with individual problems. He or she works directly with the teachers on implementation of the curriculum and classroom management, helps teachers and tutors deal with individual educational or behavior problems or other special concerns, and coordinates the activities of the family support team with those of the instructional staff. The facilitator oversees the eight-week assessment program and helps teachers make decisions about grouping, placement in tutoring, and other services.

Teachers and Teacher Training

The teachers and tutors are regular certified teachers. They received detailed teacher's manuals supplemented by two to three days of in-service at the beginning of the school year. For teachers of grades 1-3 and for reading tutors, these training sessions focused on implementation of the reading program, and their detailed teachers' manuals covered general teaching strategies as well as specific lessons. Preschool and kindergarten teachers and aides were trained in use of the STaR and Peabody programs, thematic units, and other aspects of the preschool and kindergarten models. Tutors later received an additional day of training on tutoring strategies and reading assessment.

Throughout each year, additional in-service presentations by the facilitators and other project staff covered such topics as classroom management, instructional pace, and cooperative learning. Facilitators have also organized many informal sessions to allow teachers to share problems and problem solutions, suggest changes, and discuss individual children. The staff development model used in Success for All emphasizes relatively brief initial training with extensive classroom followup, coaching, and group discussion.

Special Education

Every effort is made to deal with students' learning problems within the context of the regular classroom, as supplemented by tutors (see Slavin, Madden, Karweit, Dolan, Wasik, Shaw, Mainzer, & Haxby, 1991). Tutors evaluate students' strengths and weaknesses and develop strategies to teach in the most effective way. Tutors also communicate many effective methods of teaching students to their reading teachers. In some schools, special education teachers work as tutors and reading teachers with students identified as learning disabled.

Advisory Committee

An advisory committee composed of the building principal, program facilitator, teacher representatives, family support staff, and Johns Hopkins staff meets regularly to review the progress of the program and to identify and solve any problems that arise.

Evaluation Design

Matching

Each of the five Success for All schools was matched with a comparison school that was similar in the percent of the students receiving free lunch, historical achievement level, and other factors. Within each matched school, students were individually matched on standardized achievement test scores from the spring before implementation began. Only students in experimental and control schools who have been in their respective schools since first grade (or earlier) were included in this analysis.

Control Schools

Control schools were Baltimore City elementary schools which were (like the Success for All schools) Chapter 1 schoolwide projects. Control schools implemented a traditional reading program built around the Macmillan Connections basal series. Chapter 1 funds were primarily used in the control schools to reduce class size in grades 1-3 and to provide traditional group pullout services to low achieving students.

Measures

Assessments of reading proficiency were individually administered to students by specially trained students from local colleges who were unaware of the study hypotheses or of the schools' treatment status, and other data were obtained from school records. The specific measures used were as follows.

1. Woodcock Language Proficiency Battery (Woodcock, 1984). Two Woodcock scales, Letter-Word Identification and Word Attack, were individually administered to students in grades 1-3. The Letter-Word scale was used to assess recognition of letters and common sight words, while the Word Attack scale assessed phonetic synthesis skills.

2. Durrell Analysis of Reading Difficulty (Durrell and Catterson, 1980). The Durrell Oral Reading scale was administered to students in grades 1-3. Oral Reading presents a series of graded reading passages which students read aloud, followed by comprehension questions.

3. Retentions. The number of students retained each year was obtained from school records. These records were only available from the Success for All schools.

4. Attendance. Yearly attendance rates were obtained from school records. These records were only available from the Success for All schools.

Analyses

The reading test data were analyzed using multivariable analyses of variance (MANOVA's), with pretests (standard scores) as covariates and raw scores on the three reading scales as dependent measures. The MANOVA's produced Wilk's Lambda statistics and tests of significance which indicate the program effect on a general "reading" factor.

Following the multivariate analyses, univariate analyses (ANCOVA's) were computed for each dependent measure separately. Univariate analyses should be interpreted cautiously if multivariate analyses are not statistically significant at $p<.10$ or better.

For each of the reading variables, separate analyses were conducted for students who scored in the lowest 25% of their cohorts on the pretests. Because of the small N's at each school and grade level for these analyses the low 25% analyses must be considered exploratory rather than conclusive, but they do provide an important look at the program outcomes for students who were most at-risk. These students are of particular interest because they receive the bulk of the tutoring, family support, and other supplementary services, and because outcomes for these students have the greatest meaning for Chapter 1 and special education policies.

Results

The results of the multivariate and univariate analyses of the reading data are summarized in Tables 2-4. In the Tables, grade equivalents are shown for each outcome measure for purposes of illustration; they were never used in analyses. In addition, effect sizes are shown for each experimental-control comparison. These are computed as the difference between the experimental and control group means divided by the control group's standard deviation (Glass, McGaw, & Smith, 1981). Effect sizes are averaged across schools and across measures.

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First Grade Reading

The 1990-91 first grade cohort is the first to have experienced the Success for All preschool, kindergarten, and first grade programs in four of the five schools, and the second to do so at Abbottston. The multivariate analyses were statistically significant at every school. Univariate analyses showed consistent significant effects ($p<.05$) on the Woodcock Word Attack scale in all schools, and positive but less consistently significant effects on the other two reading measures. Effect sizes averaged +.38 for Letter-Word, +.91 for Word Attack, and +.23 for the Oral Reading scale.

As in all previous years, effect sizes for the lowest achieving students were higher than those for students in general, although often not statistically significant due to low N's. Effects for the lowest achievers were substantial (and statistically significant, $p<.05$ or better) at Abbottston, which has the highest ratio of tutors to students.

Mean effect sizes across all schools were +.61 for Letter-Word, +1.06 for Word Attack, and +.78 for Oral Reading. These are similar to end-of-first grade effects found in studies of Reading Recovery for Text Reading Level, a measure like the Durrell Oral Reading scale. Effect sizes for that program have averaged around +.75 (see Pinnell, 1989; Wasik & Slavin, 1990).

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Second Grade Reading

Results at the second grade level show a broadening of the program impact to all reading measures, not just Word Attack. The multivariate analyses were statistically significant at every school except City Springs, where the analysis narrowly failed to achieve conventional significance levels ($p<.13$). Statistically significant differences ($p<.05$ or better) were found for every measure at every school except for Word Attack at City Springs. Average effect sizes were +.55 for Letter-Word, +.70 for Word Attack, and +.55 for Oral Reading.

For the lowest achieving second graders, effects were also very positive, statistically significant ($p<.05$ or better) on all measures at Abbottston and Harriet Tubman and on Letter-Word and Word Attack at City Springs and Word Attack at Dallas Nicholas. Overall effect sizes were +.68 for Letter-Word, +1.50 for Word Attack, and +.82 for Oral Reading.

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Third Grade Reading

Effects for third graders were similar to those for second graders. The multivariate analyses were statistically significant for every school, and univariate analyses were statistically significant ($p<.05$ or better) on every measure at every school except for Letter-Word at City Springs, Word Attack at Dallas Nicholas, and Word Attack at Dr. Bernard Harris. Average effect sizes were +.50 for Letter-Word, +.71 for Word Attack, and +.50 for Oral Reading.

Again, effects for the most at-risk students were larger (in effect size terms) than for students in general, but were not always statistically significant. Significant effects ($p<.05$ or better)

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were found for this subgroup on all measures at Abbottston and Harriet Tubman and on Letter-Word at Dallas Nicholas. Average effect sizes were +.84 for Letter-Word, +1.05 for Word Attack, and +1.04 for Oral Reading.

Retentions

It is a policy of the Success for All program to avoid retaining students except under the most extreme circumstances, especially in fully-funded schools. This is not to say that every child meets usual district standards for promotion each year, but the program's philosophy is that if students are having academic problems, they should continue to receive tutoring, instruction appropriate to their needs, family support services, and other interventions rather than repeating a grade, an expensive and ineffective response to low achievement (see Shepard and Smith, 1989).

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Table 5 shows that retentions have in fact diminished markedly in all five schools, and in 1990-91 were near zero in three of the five schools (in comparison to rates ranging from 6.7% to 10.7% at pretest). Eliminating retentions has taken place much more rapidly in the high-resource schools (Abbottston and City Springs) than in the low resource schools, because the high-resource schools have more alternative interventions available, such as tutoring and family support services. However, the reductions seen in the low-resource schools are still considerable.

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Attendance

Table 6 shows the percent of students in all grades (pre-K to 5) absent each year for the five Success for All schools. The pretest year was 1986-1987 at Abbottston, 1987-88 for all other schools. The Table shows that all five schools have experienced reductions in absenteeism since the program began. However, the largest reductions by far were at the two high-resource schools, Abbottston (5.6 percentage points) and City Springs (3.1 percentage points). The three low-resource schools reduced absenteeism by an average of 1.4 percentage points.

The strong reductions in absenteeism in high-resource schools can be attributed to the additional staff added to these schools for the family support team. Abbottston had two social workers and City Springs had a social worker and an attendance aide. Still, the low-resource schools were able to reduce absences somewhat using their existing staff.

In all schools, important reductions in absences did not occur until the second or third implementation years. Absenteeism in inner-city schools is not only due to children skipping school but is often due to parents failing to send students to school every day. Convincing parents and students that every day in school is vital takes time. Further, the Success for All program focuses on grades pre-K to three in the first year and adds 4-5 in the second year. As a result, attendance in the upper grades is not expected to change until the second implementation year at the earliest.

Does Success for All Achieve Success for All?

The 1990-91 evaluation provides the first opportunity to look at the achievement of third graders who have received virtually all of their reading instruction in Success for All. Are all of these students succeeding in reading?

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Figure 1 Here
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Figure 1 summarizes data from all five Success for All and control schools for the Durrell Oral Reading scale. The scores are shown in terms of grade equivalent bands. As is clear from the Figure, not all Success for All students are within a grade equivalent of being on level. On the Durrell, 15.7% of Success for All third graders are still performing at least one year below grade level, and 3.9% are two years behind (recall that this includes all students who would ordinarily have been assigned to special education). However, the situation in the control schools is far worse. In these schools, 38.0% of third graders are reading at least one year below grade level, and 11.7% two years below. At the other end of the distribution 18.1% of Success for All

students scored at least a year above grade level and 4.9% two or more years above. The corresponding percentages for the control group were 12.1% and 1.9%.

Discussion

In the fourth year of implementation of Success for All at Abbottston Elementary School and the third year in four other Baltimore schools, the program's outcomes are very positive on a variety of measures in grades 1-3. Multivariate analyses found positive significant effects of the program in every school at every grade level, except for second grade at City Springs. First grade effects were most consistent on the Woodcock Word Attack scale, which primarily reflects the phonetic emphasis of the beginning reading program. However, in second and third grades significant effects were seen on all three reading measures in almost all comparisons. Neither the Woodcock Letter-Word scale nor the Durrell Oral Reading scale are particularly keyed to a phonetic emphasis.

Across all reading measures, effect sizes averaged +.51 in first grade, +.60 in second grade, and +.57 in third grade. A consistent effect size across the grades does not imply that effects did not continue to grow; because standard deviations increase over time, a constant effect size requires a growing difference between experimental and control groups. For example, grade equivalent differences between Success for All and control schools on all reading measures averaged approximately three months in first grade, 5.5 months in second grade, and more than eight months in third grade.

As in all previous years' evaluations, effects of Success for All were largest (in effect size terms) for students who began in the lowest quarters of their cohorts. Effect sizes averaged +.82 in first grade, +1.00 in second, and +.98 in third grade. Many of the effects on low achievers were not statistically significant on particular measures at particular grade levels because of low sample size, but the overall pattern of larger effects for the lowest achievers is clear. Success for All has the effect of substantially reducing the number of students performing below grade level.

In comparison to Success for All students, more than twice as many control third graders were performing at least a year below grade level on the Durrell Oral Reading scale, and three times as many control students were two or more years behind, a usual criterion for learning disabilities. The consistently larger effects for low achievers (found in all evaluation years) can be primarily ascribed to the provision of tutoring and other services to the most at-risk students.

In addition to performing better on reading scales, Success for All students were far less likely to be retained than were control students, with retention rates near zero for the fully-funded schools. Reducing retention is an explicit policy of the program, not an outcome measure, but the ability to successfully implement a low-retention policy in inner city schools that typically retain approximately 10% of students each year is important.

In light of the achievement findings it is clear that low performing students were not hurt by being promoted with their agemates (but continuing to receive supportive services as long as they need them). The cumulative effect of the non-retention policy is dramatic. At Abbottston, only 4% of students who should have been fourth graders had been retained, but among the five control schools 31% had failed at least one year (see Slavin et al., 1992).

Attendance rates improved in all five Success for All schools. This improvement must be ascribed in large part to implementation of the family support elements of Success for All. Attendance among young children is primarily a function of parent actions, not of individual children skipping school. By building positive relationships with parents and then following up quickly and consistently with parents who are not regularly sending their children to school, it is clear that inner-city schools can improve their attendance rates.

The largest effects were generally found at the first school, Abbottston Elementary, especially for the lowest achievers. This is not surprising; Abbottston has the highest level of funding, which means it can invest more in tutors than other schools. It also has additional family support staff not provided to the low-resource

schools, and has been in operation a year longer than the other schools.

Yet it is important to note that the main outcome differences between Abbottston and less highly funded schools is in effects on the lowest achieving students, including reducing retentions. For students in general, the low-resource schools performed nearly as well. What this implies is that it is possible to significantly raise student achievement in schools serving many disadvantaged students by improving curriculum, instruction, and support services, but to ensure success for all, a higher investment may be needed.

The need for early intervention in programming for at-risk students is attested to by the pattern of findings over the years of implementation of Success for All (see Slavin et al., 1992). Program implementation generally begins in grades K-3 or preschool-3 and then expands to encompass grades 4-5 in the second year. Yet substantial reading effects typically appear in the first implementation year only in kindergarten and first grade. In the second year large effects are also seen in second grade, and after three years, large third grade effects are found. What this implies is that improving curriculum, instruction, and support services for students who have already fallen behind is relatively ineffective. Ensuring success from the beginning of formal reading instruction (first grade or earlier) is a far more effective strategy.

While early intervention is necessary, it is not sufficient in itself. Almost without exception, effects of one-year or two-year interventions on cognitive outcomes fade over time. This has been extensively documented for effects of preschool on achievement outcomes (McKey, Condelli, Ganson, Barrett, McConkey, & Plantz, 1985), although long-term effects on such outcomes as dropout and delinquency have been found (Berrueta-Clement et al., 1984).

Reading Recovery (Pinnell, 1989), which provides one-to-one tutoring to at-risk first graders, has found effects at the end of first grade much like those found for the lowest-25% students in Success for All. However, while these effects (in raw scores) have maintained through second and third grades, effect sizes have diminished each year (see Wasik & Slavin, 1990). In contrast, reading effects for Success for All have increased each year in grade equivalent terms and remained stable in effect sizes. What this implies is that early and continued intervention are needed to ensure the cognitive growth of at-risk students throughout their schooling. The continued intervention in Success for All primarily consists of improved curriculum and instruction, not direct services to individuals, but even this relatively mild and inexpensive intervention is apparently capable of ensuring that at-risk students continue to grow in reading performance.

Can Success for All be Replicated?

The practical importance of research on Success for All would be minimal if the program depended on conditions unlikely to exist outside of the five pilot schools, yet this is not the case. As of this writing, Success for All exists in 31 schools in 12 states, including California, Idaho, Pennsylvania, South Carolina, Alabama, Tennessee, and Indiana.

A three-year evaluation in a Philadelphia school with a majority of Cambodian students found very positive effects of the program (Slavin & Yampolsky, 1991), as have shorter evaluations in Memphis (Ross & Smith, 1991) and rural Maryland (Slavin & Madden, 1991). After small scale pilots, school districts in Philadelphia; Montgomery, Alabama; Charleston, South Carolina; Wichita Falls, Texas; and Caldwell, Idaho have expanded the model to additional schools within their districts. Clearly, successful implementation of Success for All does not depend on proximity to Baltimore or on unusually charismatic principals or outstanding staffs.

The greatest impediment to practical applications of Success for All is the program's cost. However, cost need not be a barrier, especially beyond the short term. Success for All implementations are primarily funded by Chapter 1. In the time since Abbottston Elementary began to implement Success for All (1987-88), national funding for Chapter 1 has increased by almost 70% (to nearly $6.7 billion in 1992-93). Some of these funds have gone into concentration grants, which give high-poverty districts disproportionate increases, and many districts are concentrating Chapter 1 funds in their highest-poverty elementary schools. As a result, many districts can fully fund Success for All as an alternative use of the same funds provided to all similar schools.

In addition, Success for All brings about many savings. Total per-pupil cost in Baltimore is almost $4800; retaining a student may be seen as

investing in a very expensive remedial year. Reducing retentions from 11% to zero in a school of 500 students thus saves $264,000 per year. Reductions in special education referrals and placements, duplicate services, and other costs further offset the program's overall expense (see Slavin et al., 1992).

Policy Implications

As is the case for any early intervention program, the full impact of Success for All cannot be known until long after students have completed the program. However, after four years of program implementation it is possible to discuss implications of the model for several important policy areas.

The primary importance of research on Success for All is in demonstrating that with early and continuing intervention nearly all children can be successful in reading. Common practice in compensatory education (primarily the federal Chapter 1 program) and in special education is to identify children who have already fallen behind and then to provide them with remedial services which may last for many years (Allington & McGill-Franzen, 1990; Anderson & Pellicer, 1990). Research on Success for All and on other intensive early intervention programs -- such as Reading Recovery (Pinnell, 1989) and Prevention of Learning Disabilities (Silver & Hagin, 1990) -- has begun to provide practical and effective alternatives to the remedial approach. If reading failure is fundamentally preventable for nearly all children, thinking about learning disabilities and about compensatory education must change (see Slavin et al., 1992; Slavin et al., 1991; Slavin, 1991, for more on this).

More research is still needed on Success for All. Each year of evaluation adds information about the long-term impact of the program. There is a need to evaluate the many program components separately, to evaluate less expensive versions of the program, and to evaluate it in different settings. However, the findings to date suggest that Success for All is effective in enhancing the reading success of students in inner-city schools, and this has important immediate implications for policy and practice.

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Table 1
Characteristics of Success For All Schools

School	Location	Enroll-ment	Ethnicity	Percent Free Lunch	Years In Program	Resource Level	Number of Tutors	Preschool?	Full-Day Kindergarten?	Add'l Family Support Staff	Full/Half-Time Facilitator
Abbottston Elementary	Baltimore	550	97% Black	83%	3	High	6	Yes	Yes	2	Full
City Springs Elementary	Baltimore	500	99% Black	97%	2	High	9	Yes	No	2 1/2	Full
Dallas Nicholas Elementary	Baltimore	439	99% Black	98%	2	Low	2	Yes	No	0	Half
Harriet Tubman Elementary	Baltimore	475	100% Black	94%	2	Low	3	Yes	Yes	0	Half
Dr. Bernard Harris Elementary	Baltimore	634	100 % Black	94%	2	Low	3	Yes	Yes	0	Half

Table 2
Effects of Success for All on Individual Reading Measures
Grade 1

		Abbottston			City Springs			Dallas Nicholas			Harriet Tubman			Dr. Bernard Harris		All Schools	
		SFA	Control	F	SFA	Control	F	SFA	Control	F	SFA	Control	F	SFA	Control	F	ES
Wilk's Lambda		.839		6.22***	.712		13.86***	.814		5.40**	.851		4.37**	.761		12.65***	
All Students																	
PRE	x	429.10	428.33		407.78	407.57		377.26	378.71		456.78	456.60		366.16	371.30		
	(SD)	(73.59)	(72.70)		(65.13)	(66.40)		(49.62)	(48.87)		(57.02)	(56.19)		(58.23)	(54.19)		
Letter-Word	x	18.33	17.06	1.18	18.17	15.20	9.71**	16.03	14.87	1.30	20.65	18.47	3.12a	19.17	14.60	19.31***	
	(SD)	(5.32)	(7.16)		(5.13)	(6.14)		(3.89)	(5.48)		(4.99)	(6.59)		(5.93)	(6.67)		
	GE	1.6	1.5		1.6	1.4		1.5	1.4		1.8	1.6		1.7	1.4		
	ES	+.18			+.48			+.21			+.33			+.69			+.38
Word Attack	x	5.69	2.71	12.18***	5.15	1.89	27.14***	4.32	1.68	11.79***	5.90	3.20	8.77**	5.95	1.94	38.45***	
	(SD)	(4.71)	(3.89)		(3.80)	(3.18)		(4.15)	(2.84)		(4.06)	(4.19)		(3.81)	(3.45)		
	GE	2.2	1.7		2.1	1.6		2.0	1.5		2.2	1.8		2.2	1.6		
	ES	+.77			+1.03			+.93			+.64			+1.16			+.91
Oral Reading	x	6.24	5.33	<1	4.70	3.63	1.71	3.05	3.05	<1	6.50	5.90	<1	6.79	3.62	17.29***	
	(SD)	(4.81)	(6.23)		(4.58)	(4.81)		(3.25)	(4.43)		(5.50)	(4.83)		(4.64)	(4.83)		
	GE	2.0	1.8		1.7	1.5		1.4	1.4		2.0	1.9		2.1	1.5		
	ES	+.15			+.22			.00			+.12			+.66			+.23
Mean	ES	+.37			+.58			+.38			+.36			+.84			+.51
	N	51	51		54	54		38	38		40	40		63	63		
Low 25%																	
PRE	x	335.00	334.62		321.00	319.64		322.90	325.70		376.60	377.60		292.56	301.37		
	(SD)	(20.83)	(22.99)		(30.26)	(34.00)		(18.21)	(20.61)		(35.42)	(34.03)		(27.37)	(27.52)		
Letter-Word	x	18.92	10.85	15.17***	14.00	10.86	2.78a	16.60	14.20	1.35	17.80	16.40	<1	16.44	12.00	4.54*	
	(SD)	(4.33)	(6.19)		(4.21)	(5.49)		(3.03)	(7.77)		(4.08)	(6.40)		(7.75)	(6.97)		
	GE	1.7	1.2		1.3	1.2		1.5	1.3		1.6	1.5		1.5	1.2		
	ES	+1.30			+.57			+.31			+.22			+.64			+.61
Word Attack	x	6.69	0.69	14.91***	2.57	0.86	2.84a	4.10	1.80	3.15a	4.80	2.80	1.21	6.12	1.81	8.21**	
	(SD)	(4.91)	(2.50)		(2.90)	(2.41)		(3.25)	(3.36)		(4.10)	(3.82)		(5.15)	(4.43)		
	GE	2.4	1.3		1.7	1.3		1.9	1.6		2.0	1.7		2.2	1.6		
	ES	+2.40			+.71			+.68			+.52			+.98			+1.06
Oral Reading	x	5.85	1.08	15.96***	1.86	0.86	<1	4.40	2.40	1.51	3.80	4.20	<1	5.63	1.37	10.36**	
	(SD)	(3.31)	(2.66)		(3.80)	(2.68)		(3.24)	(4.79)		(3.71)	(4.94)		(5.57)	(3.07)		
	GE	1.9	1.1		1.2	1.1		1.7	1.3		1.6	1.6		1.9	1.2		
	ES	+1.79			+.37			+.42			-.08			+1.38			+.78
Mean	ES	+1.83			+.55			+.47			+.22			+1.00			+.82
	N	13	13		14	14		10	10		10	10		16	16		

a p<.10
* p<.05
** p<.01
*** p<.001

Table 3
Effects of Success for All on Individual Reading Measures
Grade 2

		Abbottston SFA	Abbottston Control	F	City Springs SFA	City Springs Control	F	Dallas Nicholas SFA	Dallas Nicholas Control	F	Harriet Tubman SFA	Harriet Tubman Control	F	Dr. Bernard Harris SFA	Dr. Bernard Harris Control	All Schools F	All Schools ES
Wilk's Lambda		.734		7.84***	.926		1.96	.797		5.85***	.792		9.69***	.886		4.69**	
All Students																	
PRE	x	330.80	331.23		364.80	364.46		333.59	335.54		356.36	360.47		341.67	342.68		
	(SD)	(69.50)	(67.72)		(63.66)	(63.58)		(66.68)	(65.64)		(81.91)	(68.44)		(69.77)	(66.99)		
Letter-Word	x	25.69	21.49	18.25***	23.44	20.72	4.98*	24.89	20.73	11.39***	26.26	22.52	15.80***	24.76	21.67	10.08**	+ .55
	(SD)	(5.80)	(5.93)		(5.92)	(7.23)		(7.37)	(6.65)		(6.76)	(6.60)		(6.71)	(7.10)		
	GE	2.4	1.9		2.1	1.8		2.2	1.8		2.5	2.0		2.2	1.9		
	ES	+.71			+.38			+.63			+.57			+.44			
Word Attack	x	8.46	5.46	7.10**	7.10	5.85	1.37	9.22	4.73	17.68***	10.00	5.05	29.01***	7.92	5.08	12.12***	
	(SD)	(6.83)	(4.33)		(5.14)	(5.04)		(6.00)	(4.68)		(6.65)	(4.82)		(6.25)	(4.93)		
	GE	2.8	2.1		2.5	2.2		3.0	2.0		3.2	2.1		2.7	2.1		
	ES	+.69			+.25			+.96			+1.03			+.58			+ .70
Oral Reading	x	14.00	8.46	20.95***	10.87	8.56	4.06*	10.81	8.16	5.00*	12.62	9.45	11.64**	11.61	9.10	7.00**	
	(SD)	(8.44)	(5.68)		(6.90)	(4.50)		(7.80)	(6.42)		(6.34)	(6.67)		(7.24)	(6.44)		
	GE	3.3	2.3		2.7	2.4		2.7	2.3		3.0	2.5		2.9	2.5		
	ES	+.98			+.51			+.41			+.48			+.39			+ .55
Mean	ES	+.79			+.38			+.67			+.69			+.47			+ .60
	N	35	35		39	39		37	37		58	58		51	51		
Low 25%																	
PRE	x	247.00	250.00		283.30	283.40		244.33	247.33		248.27	264.13		246.15	250.15		
	(SD)	(26.32)	(29.10)		(26.09)	(27.05)		(19.74)	(17.91)		(39.32)	(38.96)		(41.92)	(31.49)		
Letter-Word	x	21.22	15.11	8.15**	20.90	13.90	5.94*	18.00	14.89	1.55	19.13	15.47	4.30*	17.38	17.46	<1	
	(SD)	(3.80)	(5.69)		(5.32)	(7.13)		(4.80)	(5.44)		(4.07)	(4.70)		5.45	5.35		
	GE	1.9	1.4		1.8	1.3		1.6	1.4		1.7	1.4		1.6	1.6		
	ES	+1.07			+.98			+.57			+.78			-.01			+ .68
Word Attack	x	4.89	1.78	5.17*	5.50	1.90	7.29*	5.11	1.22	6.82*	5.40	1.13	12.32**	3.00	1.54	2.68	
	(SD)	(3.55)	(2.44)		(3.14)	(2.64)		(3.82)	(1.92)		(4.30)	(2.00)		3.24	2.18		
	GE	2.1	1.6		2.1	1.6		2.1	1.4		2.1	1.4		1.8	1.5		
	ES	+1.28			+1.36			+2.03			+2.14			+.67			+1.50
Oral Reading	x	7.11	3.56	5.11*	8.40	4.80	3.05a	4.22	2.00	1.52	6.27	2.93	6.42*	4.46	3.38	1.06	
	(SD)	(4.37)	(4.10)		(6.10)	(3.68)		(4.30)	(2.65)		(3.77)	(3.10)		4.17	3.40		
	GE	2.1	1.5		2.3	1.7		1.6	1.3		2.0	1.4		1.7	1.5		
	ES	+.87			+.98			+.84			+1.07			+.32			+ .82
Mean	ES	+1.07			+1.11			+1.15			+1.33			+.33			+1.00
	N	9	9		10	10		9	9		15	15		13	13		

a p<.10
* p<.05
** p<.01
*** p<.001

Table 4
Effects of Success for All on Individual Reading Measures
Grade 3

		Abbottston SFA	Abbottston Control	E	City Springs SFA	City Springs Control	E	Dallas Nicholas SFA	Dallas Nicholas Control	E	Harriet Tubman SFA	Harriet Tubman Control	E	Dr. Bernard Harris SFA	Dr. Bernard Harris Control	All Schools E	All Schools ES
Wilk's Lambda		.791		7.64***	.750		8.98***	.895		2.23[a]	.830		4.91**	.932		2.11[a]	
All Students																	
PRE	x	328.63	332.61		330.47	332.02		381.81	381.81		367.59	367.59		340.28	342.46		
	(SD)	(96.99)	(85.98)		(87.74)	(74.56)		(54.65)	(54.65)		(57.29)	(57.29)		(85.20)	(81.12)		
Letter-Word	x	30.61	26.17	15.93***	25.40	24.33	<1	29.97	27.55	4.64*	29.54	24.82	12.84***	28.24	25.39	6.27**	
	(SD)	(7.11)	(6.57)		(6.56)	(5.17)		(5.03)	(5.12)		(6.07)	(6.57)		(7.08)	(6.84)		
	GE	3.6	2.5		2.3	2.2		3.4	2.8		3.3	2.2		3.0	2.3		
	ES	+.68			+.21			+.47			+.72			+.42			+.50
Word Attack	x	13.04	7.24	23.17***	9.79	5.74	11.77***	10.58	8.94	1.43	11.08	6.34	12.84***	9.26	7.30	2.98[a]	
	(SD)	(7.73)	(5.06)		(6.72)	(4.58)		(6.15)	(5.54)		(7.14)	(5.09)		(6.27)	(6.67)		
	GE	4.4	2.5		3.1	2.2		3.4	2.9		3.6	2.3		3.0	2.5		
	ES	+1.15			+.88			+.30			+.93			+.29			+.71
Oral Reading	x	19.09	14.48	11.14***	14.23	11.26	6.42**	18.13	14.71	4.82*	16.21	12.56	8.03**	15.91	13.48	4.66*	
	(SD)	(7.38)	(7.74)		(5.83)	(5.72)		(6.94)	(6.25)		(7.21)	(7.05)		(6.77)	(8.03)		
	GE	4.1	3.4		3.3	2.8		3.6	3.4		3.6	3.0		3.6	3.2		
	ES	+.60			+.52			+.55			+.52			+.30			+.50
Mean	ES	+.81			+.54			+.44			+.72			+.34			+.57
	N	46	46		43	43		31	31		39	39		46	46		
Low 25%																	
PRE	x	203.58	222.42		219.90	231.40		306.38	306.38		290.30	290.30		222.83	230.75		
	(SD)	(43.62)	(24.07)		(82.09)	(35.40)		(18.67)	(18.67)		(27.45)	(27.45)		(37.74)	(32.99)		
Letter-Word	x	25.50	20.17	7.54**	22.50	21.40	<1	27.75	24.25	4.40*	28.50	20.70	11.25**	22.08	20.92	<1	
	(SD)	(6.99)	(4.37)		(7.15)	(5.58)		(2.92)	(3.53)		(7.58)	(5.14)		(6.53)	(4.70)		
	GE	2.4	1.8		2.0	1.9		2.9	2.2		3.1	1.8		2.0	1.8		
	ES	+1.22			+.20			+.99			+1.52			+.25			+.84
Word Attack	x	10.17	2.33	13.41***	6.00	3.50	<1	7.25	7.13	<1	10.50	4.10	6.62*	5.25	4.00	<1	
	(SD)	(8.22)	(2.90)		(5.21)	(5.00)		(4.56)	(1.89)		(7.29)	(3.76)		(5.24)	(4.67)		
	GE	3.2	1.7		2.2	1.8		2.5	2.5		3.4	1.9		2.1	1.9		
	ES	+2.70			+.50			+.06			+1.70			+.27			+1.05
Oral Reading	x	15.83	7.83	17.66***	11.80	7.40	3.02[a]	16.75	11.00	3.73[a]	12.20	6.80	5.50*	9.00	8.00	<1	
	(SD)	(7.06)	(4.39)		(5.03)	(5.66)		(6.92)	(4.28)		(5.77)	(5.35)		(4.78)	(4.59)		
	GE	3.6	2.2		2.9	2.2		3.7	2.8		3.0	2.1		2.4	2.3		
	ES	+1.82			+.78			+1.35			+1.01			+.22			+1.04
Mean	ES	+1.91			+.49			+.80			+1.41			+.25			+.98
	N	12	12		10	10		8	8		10	10		12	12		

[a] p<.10
* p<.05
** p<.01
*** p<.001

Table 5

Percent of Students Retained in Success for All Schools

	Pre*	Year 1	Year 2	Year 3	Year 4
Abbottston	10.7	0.2	0.0	0.3	0.5
City Springs	10.6	7.6	0.0	0.4	
Dallas Nicholas	7.3	5.9	3.4	0.0	
Harriet Tubman	6.7	3.4	1.7	1.9	
Dr. Bernard Harris	6.8	5.2	3.8	1.6	

* 1986-87 for Abbottston; 1987-88 for all other schools.

Table 6

Percent of Students Absent in Success for All Schools

	Pre*	Year 1	Year 2	Year 3	Year 4
Abbottston	13.0	12.5	11.2	7.0	7.4
City Springs	14.0	14.0	10.1	10.9	
Dallas Nicholas	10.7	13.5	10.0	9.0	
Harriet Tubman	10.3	11.6	9.6	8.8	
Dr. Bernard Harris	10.4	10.5	9.6	9.5	

* 1986-87 for Abbottston; 1987-88 for all other schools.

FIGURE 1

Distribution of Grade Equivalent Scores on the Durrell Oral Reading Test, Third Grades in Baltimore Success for All Schools (1991)